

Solar/Electric Utility Vehicle

Program Narrative

Organization's Statement of Purpose

The mission of the Frisco Police Department is to maintain and improve community livability by working with all citizens to preserve life, maintain human rights, protect property, and promote individual responsibility and community commitment. It has been protecting the citizens of Frisco since 1965.

The Frisco Police Department provides Law Enforcement services to the citizens of Frisco with an annual operating budget of \$15.8 million dollars, which provides and supports a total of 200 employees including a uniformed sworn force of 140 officers.

The Frisco Police Department is a proven leader in North Texas law enforcement and an internationally accredited Law Enforcement Agency through the Commission on Accreditation of Law Enforcement Agencies (CALEA).

Project Description

The Frisco Police Department is responsible for all security for the City of Frisco as well as all major events occurring within the City, which requires us to have a major presence, along with the Fire Department, at all these events. Due to the space restrictions of some of these indoor and outdoor venues, it is impossible to drive a standard vehicle through the complexes.

Utilizing a standard vehicle is out of the question and requires some type of specialty vehicle to accomplish the task of rapidly responding to an emergency or bringing added manpower to a location deep within one of these larger venues.

Because of the close proximity to people, it becomes important to operate a vehicle which will be both quiet and non-polluting so as to not compromise the attendees' experience and provide a "green" solution to protect the health of the public, participants, and the staff.

Project Goals/Objectives

Our solution satisfies all these requirements. A solar/electric powered utility vehicle is small enough to move through public venues and won't pollute. The Solar/Electric combination will provide dual power for rapid charging (requiring less plug-in time) and extend the operating time of more traditional Electric/Battery combination vehicles.

The vehicle is extremely quiet and almost silent when using only battery power which makes it highly suitable for the patrol function in and around residential and commercial areas. The City currently fields several electric vehicles as part of its fleet operations and thus would not require special handling or maintenance which would be a cost savings to the City and the Police Department.

When the Grant period comes to an end, these vehicles would easily be absorbed into the Police Department's inventory and continue to be maintained by City Services Fleet Division. This solution makes a perfect fit in our overall strategy of conserving fuels and moving to alternative transportation.

Impact/Outcomes and Evaluation

We believe our proposal addresses and fulfills two of CoServ Charitable Foundation's Initiatives:

- Community Service – Programs, project and organizations that are important components of a community's overall quality of life, with an emphasis on public safety, healthcare, self-sufficiency and basic human needs.
- Environment – Programs that promote recycling and natural resource preservation; community-based environmental quality education programs.

If awarded this grant, the Frisco Police Department will follow the City of Frisco Purchasing Guidelines and purchase the Solar/Electric Vehicle. As part of the exterior paint scheme, we would include a CoServ graphic indicating the vehicle had been funded through the Charitable Foundation. We would operate the Solar/Electric Utility Vehicle at all large scale Entertainment and City events.

At the end of the grant period, the Frisco Police Department will provide a Project Status or Completion Report describing the use of the Solar/Electric Utility Vehicle and identifying the benefit to the community we serve and how Foundation funds were used.

We believe a partnership between CoServ and the Frisco Police Department in this matter would provide both of us very positive exposure in a rapidly growing segment of North Texas and at the same time help us inform, educate and protect our customers,

the citizens and visitors of the City of Frisco who would greatly benefit by your company's generosity.

Explanation of how funds will be used

In our research we discovered there are several manufacturers who design, build and market electric utility vehicles but one in particular seems to meet our requirements. The KUDO 6043/ 4 is a Solar and Electric battery combination utility vehicle that seats four, can attain speeds up to 25 MPH and has a 60 mile range. The KUDO 4 comes in a Police Package with all the appropriate lighting as well as a PA/Siren for emergency use. The only add-on would be our Police Communication radio and antenna.

The specifications for the vehicle are as follows:

KUDO 6043 KUDO 4 Police Package

Solar panel 48 Volt, 180 watt, 3+ amp output

Drive Motor 4kw ADC Motor, 48V

Horsepower 5.5 hp 4kw motor

Batteries 8 - 6 V, std: Heavy Duty: T145 = 145min @ 75amps

Overall Length 9.75 (ft)

Overall Width 4.59 (ft)

Overall Height 5.94 (ft)

Wheelbase 80.50"

Ground Clearance 5.75" at rear differential

Radio Motorola XTS 2500 P25 800Mhz Mobile Radio and antenna

Lighting Whelen standard Police Package, PA System, Siren, and Hailer (Several Different Tones)

Cost:

KUDO Solar-Electric 4 passenger vehicle	\$13,000
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